REMARKS

The Office Action dated February 12, 2007 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 24, 34, 44 and 45 have been amended to particularly point and distinctly claim the invention. No new matter has been added, and no new issues are raised which require further consideration and/or search. Claims 20-23 have been cancelled. Claims 1-19 and 24-45 are submitted for consideration.

Claims 1, 24, 34 and 44-45 were rejected under 35 U.S.C. 112, second paragraph as being indefinite. Specifically, the term "more efficiently" recited in these claims were objected to. Claims 1, 24, 34 and 44-45 have been amended to overcome this rejection. Therefore, Applicants request that this rejection be withdrawn.

Claims 1, 24 and 34 were rejected under 35 U.S.C. 112, second paragraph. The Office Action alleged that, "wherein the first server provides the service in a **single service stream** to the at least one each second server to be then provided for the plurality of client devices redirected to the at least one second server," as recited in claims 1, 24 and 34, has not been found in the detailed description of the invention. Applicants submit that paragraph 0028 of the specification discloses that the main server transfers or redirects some users into additional servers; the main server now has a much smaller number of users (mainly other servers). Paragraph 0031 of the specification also discloses that the main server has now created a distributed server tree with one or more

branch servers and a lot of users having a SIP relationship with these branch servers so that when **a message** is sent to a group, the main server sends **the message** to the branch servers. Furthermore, figure 4 shows a diagram of a SIP server 40 with a large number of clients. Paragraph 0036 of the specification discloses that figure 4 shows that SIP server 40 redirects one or more clients to SIP server 44. Paragraph 0037 also discloses that figure 5 shows a diagram of a created distributed server tree, where there is **one** communications link from SIP server 40 to SIP server 44 and SIP server 42, respectively, and multiple links from SIP server 44 to clients 45A-45D and from SIP server 42 to clients 46A-46C. Paragraph 0031 also discloses that when a single message or event is sent on the link from the SIP server 40 to SIP server 44 and SIP server 42, respectively, the message is replicated from SIP server 44 to clients 45A-45D and from SIP server 42 to clients 46A-46C. Therefore, Applicants submit that the specification does disclose "wherein the first server provides the service in **a single service stream** to each of the at least one second server to be then provided for the plurality of client devices redirected to each of the at least one second server," as recited in claims 1, 24 and 34. In view of the discussion above, Applicants request that the rejection be withdrawn.

Claims 1-2, 4-15, 19, 24, 26-34 and 36-43 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,167,449 to Arnold (hereinafter Arnold) in view of "Dynamic Load Balancing on Web-Server Systems by Cardellini (hereinafter Cardellini) and further in view of "An Example of Using Presence and Availability in an Enterprise for Spontaneous Multiparty, Multimedia Communications" by Shim

(hereinafter Shim). According to the Office Action, Arnold teaches all of the elements of the claimed invention except for redirecting based on the client device location. Thus, the Office Action uses Cardellini and Shim to cure these deficiencies, and to argue that a combination of Arnold, Cardellini and Shim discloses or suggests all of the elements of these claims. The rejection is traversed as being based on references that neither teach nor suggest the combination of elements recited in each of claims 1-2, 4-15, 19, 24, 26-34 and 36-43.

Claim 1, upon which claims 2-23 depend, recites a method including receiving requests for a service at a first server from a plurality of client devices and determining to identify at least one other server to provide the service to at least some of the plurality of client device on the basis of determining that a plurality of client devices are located in particular location. The method also includes creating a resource identifier at a at least one second server. The method further includes redirecting at least some of the plurality of client devices to get the service from the at least one second server. The first server provides the service in a single service stream to each second server to be then provided for the plurality of client device redirected to the at least one second server, therefore, reducing the load on the first server.

Claim 24, upon which claims 25-33 depend, recites a computer program embodied on a computer readable medium, the computer program causing computing device to receive requests for a service from a plurality of client devices and determine to identify at least one other server to provide the service to at least one of the plurality of client

device. The computing device also determines that some of the plurality of client devices fulfill load balancing criteria for providing the service more efficiently via at least one second server and creates a resource identifier at a at least one second server. The computing device further redirects at least some of the plurality of client devices to get the service from the at least one second sever, wherein the server provides the service in a single service stream to the at least one second server to be then provided to some of the plurality of client devices redirected to the at least one second server, therefore, reducing the load on the server.

Claim 34, upon which claims 35-40 depend, recites a server configured to perform receiving requests for a service from a plurality of client devices and determining to identify at least one other server to provide the service to at least one of the plurality of client device. The server also performs determining that some of the plurality of client devices fulfill load balancing criteria for providing the service more efficiently via at least one second server and creating a resource identifier at a at least one second server. The server further performs redirecting at least some of the plurality of client devices to get the service from the at least one second sever, wherein the server provides the service in a single service stream to the at least one second server to be then provided to some of the plurality of client devices redirected to the at least one second server, therefore, reducing the load on the server.

Claim 44 recites an apparatus including a receiving unit configured to receive requests for a service at a first server from a plurality of client devices and a determining

unit configured to determine to identify at least one other server to provide the service to at least one some of the plurality of client device on the basis of determining that a plurality of client devices are located in a particular location. The apparatus also includes a determining unit configured to determine that some of the plurality of client devices fulfill load balancing criteria for providing the service more efficiently via at least one second server and a creating unit configured to create a resource identifier at the a at least one second server. The apparatus further includes a redirecting unit configured to redirect at least some of the plurality of client devices to get the service from the at least one second server. The first server provides the service in a single service stream to the at least one each second server to be then provided for the plurality of client devices redirected to the at least one second server to some of the plurality of client devices, therefore, reducing the load on the first server.

Claim 45 recites an apparatus including receiving means for receiving requests for a service at a first server from a plurality of client devices and determining means for determining to identify at least one other server to provide the service to at least one some of the plurality of client device on the basis of determining that a plurality of client devices are located in a particular location. The apparatus also includes determining means for determining that some of the plurality of client devices fulfill load balancing criteria for providing the service more efficiently via at least one second server and creating means for creating a resource identifier at the a at least one second server. The apparatus also includes redirecting means for redirecting at least some of the plurality of

client devices to get the service from the at least one second server. The first server provides the service in a single service stream to the at least one each second server to be then provided for the plurality of client devices redirected to the at least one second server to some of the plurality of client devices, therefore, reducing the load on the first server.

As will be discussed below, the cited prior art references of Arnold, Cardellini and Shim fail to disclose or suggest the elements of any of the presently pending claims.

Arnold teaches an interface for application programs to use when seeking to interact or browse services provided on a network. The application can browse for network services without being configured with the Network Layer protocols that are used to communicate with provider of those services. The interface is configured to access any number of service identification protocol (SIP) servers under predefined network protocols. The interface can be configured as a client to SIP servers based on several different combinations of SIPs running over different network protocols. Thus, the different SIP servers can reside in different networks connected to each other using a router and communicate with the interface using their identification and network protocols. The interface receives a request for a type of service and, in response, queries one or more of the SIP servers with which it is configured to communicate. In particular, the interface looks up the type of service in each SIP server's database of registered services. After collecting the entries in the SIP server database that have a field matching the requested service type, the interface returns the result data to the application.

Therefore, the interface allows any application to browse for network services without being configured with the network protocol of a service provider.

Cardellini teaches an approach that distributed Web-server architectures use to request routing mechanisms on a cluster side. In this approach, a scheduling algorithm is used by client DNS to share load among Web-Server nodes. The algorithms are classified on the basis of system state information the DNS uses for the Web-server choice. See at least Section 4.

Shim discloses spontaneous enterprise communications (SEC) designed to support spontaneous, ad-hoc conferencing in an enterprise. SEC enables team members to subscribe to presence and availability state of each other and to conduct conferencing with those who are available on the fly. See at least Section A.

Applicants submit that the combination of Arnold, Cardellini and Shim fail to teach or suggest the combination of elements recited in the pending claims. Each of the independent claims, in part, recite redirecting at least some of the plurality of client devices to get the service from the at least one second server, the first server provides the service in a single service stream to each second server to be then provided for the plurality of client device redirected to the at least one second server, therefore, reducing the load on the first. According to the pending claims, the first server receives a plurality of requests from a plurality of clients. The first server then determines that another server is able to provide the service more efficiently to the plurality of clients. Thus, the first

server forwards the plurality of requests to the other server in a single request, wherein the second server processes and responds to each of the plurality of requests.

Arnold does not teach or suggest redirecting at least some of the plurality of client devices to get the service from each of the at least one second server, the first server provides the service in a single service stream to each second server to be then provided for the plurality of client device redirected to the at least one second server, therefore, reducing the load on the first server, as recited in the pending claims. As mentioned above, the interface of Arnold receives a request for a type of service and, in response, queries one or more of the SIP servers with which it is configured to communicate and looks up the type of service in each SIP server's database of registered services. After collecting the entries in the SIP server database that have a field matching the requested service type, Arnold teaches that the interface returns the result data to the application. As such, in Arnold the interface allows any application to browse for network services without being configured with the network protocol of a service provider. The interface of Arnold does not redirect at least some of the plurality of client devices to get the service from at least one second server, the first server provides the service in a single service stream to each second server to be then provided for the plurality of client device redirected to the at least one second server, therefore, reducing the load on the first server, as recited in claims 1, 24, 34 and 44-45, and claims dependent thereon.

In the "Response to Arguments" section, the Office Action alleged that there is no support in the specification for providing services in a single stream. Page 10 lines 16-20

of the current application discloses that a main server creates a distributed server tree with one or more branch servers, wherein a lot of users have a SIP relationship with the branch server. According to this section of the specification, when an event happens or if a message is sent to the group, the main server sends the message to the branch server to be distributed to the clients. This supports Applicant previous arguments that the present invention discloses redirecting at least some of the plurality of client devices to get the service from each of the at least one second server, the first server provides the service in a single service stream to each second server to be then provided for the plurality of client device redirected to the at least one second server, therefore, reducing the load on the first server, as recited in claims 1, 24, 34 and 44-45. It should be apparent to one skilled in the art that the main server, as disclosed in the present application, will not send multiple messages for the same service to a second server if the object of the invention is to reduce the load on the main server.

Cardellini and Shim fail to cure the deficiencies of Arnold as outlined above. Specifically, Cardellini and Shim fail to teach or suggest redirecting at least some of the plurality of client devices to get the service from at least one second server, the first server provides the service in a single service stream to each second server to be then provided for the plurality of client device redirected to the at least one second server, therefore, reducing the load on the first server and providing more efficient service to the plurality of client devices, as recited in claims 1, 24, 34 and 44-45. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn

because neither Arnold, Cardellini nor Shim, whether taken singly or combined, teaches or suggests each feature of claims 1, 24, 34 and 44-45 and hence, dependent claim 2, 4-15, 19, 26-33 and 36-43 thereon.

Claims 3, 16-18, 25 and 35 were rejected under 35 U.S.C.103(a) as being unpatentable over Arnold in view of Cardellini as applied to claims 1, 24 and 34 and further in view of U.S. Patent No. 6,175,869 to Ahuja (hereinafter Ahuja). According to the Office Action, Ahuja teaches a technique for server allocation which includes dispatch mechanism for dispatching requests to servers based on the server load. Thus, the Office Action combined the teachings of Arnold, Cardellini and Ahuja in an effort to yield all of the elements of claims 3, 16-18, 25 and 35. The rejection is traversed as being based on references that neither teach nor suggest the combination of elements recited in each of independent claims 1, 24 and 34, upon which claim 3, 16-18, 25 and 35 depend.

Ahuja teaches a system with a pool of replicated services that requires a mechanism for dispatching each incoming client request to an appropriate server in the pool. Claims 3 and 16-18 are dependent on claim 1; claim 25 is dependent on claim 24 and claim 35 is dependent on claim 34. Thus, each of claims 3, 16-18, 25 and 35 incorporates all of the elements of claims 1, 24 and 35.

Ahuja does not cure the deficiencies of Arnold and Cardellini with respect to claims 1, 24 and 34. Specifically, Ahuja does not teach or suggest redirecting at least some of the plurality of client devices to get the service from at least one second server, wherein the first server provides a single service stream to each of the at least one second

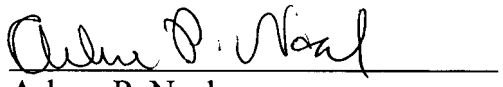
server for the plurality of client devices redirected to the at least one second server, and the at least one second server provides a plurality of service streams to plurality of client devices redirected to the at least one second server, therefore, reducing the load on the first server, as recited in each of claims 1, 24 and 34. Therefore, we may request that this rejection be withdrawn. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Arnold, Cardellini nor Ahuja whether taken singly or combined, teaches or suggests each feature of claims 1, 24 and 34 and hence, dependent claim 3, 16-18, 25 and 35 thereon.

As noted previously, claims 1-19 and 24-45 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-19 and 24-45 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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